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United States Patent & Trademark Office; U.S. DEPARTMENT OF COMMERCE

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number (Optional) 59864.00665
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed Name _____	Application Number: 10/080,933 Filed: February 22, 2002 First Named Inventor: Jianzhong ZHANG et al. Art Unit: 2611 Examiner: Jean B. CORRIELUS

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

Peter Flanagan
Signature

☐ Applicant/Inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed

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Typed or printed name

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Reg. No. is acting under 37 CFR 1.34 _____

September 15, 2006
Date

NOTE: Signatures of all of the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:	Confirmation No.: 6502
Jianzhong ZHANG et al.	Art Unit: 2611
Application No.: 10/080,933	Examiner: CORRIELUS, Jean B.
Filed: February 22, 2002	Attorney Dkt. No.: 59864.00665

For: APPARATUS, AND ASSOCIATED METHOD, FOR A MULTIPLE-INPUT, MULTIPLE OUTPUT COMMUNICATION SYSTEM

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

September 15, 2006

Sir:

In accordance with the Pre-Appeal Brief Conference Pilot Program guidelines set forth in the July 12, 2005 Official Gazette Notice, Applicants hereby submit this Pre-Appeal Brief Request for Review of the final rejections of claims 21-42 in the above identified application. Claims 21-42 were finally rejected in the Office Action dated May 15, 2006. Applicants filed a Response to the Final Office Action on August 15, 2006, and the Office issued an Advisory Action dated August 28, 2006 maintaining the final rejections of claims 21, and 23-42. Applicants hereby appeal these rejections and submit this Pre-Appeal Brief Request for Review.

Clear Error in the Rejection of Claims 27 and 37

Claims 27 and 37 were rejected as obvious in view of the combination of Stenstrom, Zangi, and Sexton. This rejection is clear error, because Sexton is not proper prior art as used by the rejection. Specifically, 35 U.S.C. 103(c) bars the use of Sexton to show obviousness of the claims of the present application.

Sexton is only potentially prior art under 35 U.S.C. 102(e). The present application was filed February 22, 2002. Sexton was published May 1, 2003, based on an application filed October 25, 2001. Thus, Sexton is prior art to the present application, if at all, only under 35 U.S.C. 102(e).

Sexton and the present application were subject to an obligation of assignment to the same entity, Nokia Corporation, at the time of the invention. Sexton's assignment to Nokia Corporation was recorded October 25, 2001, at Reel 012364, Frame 0227. The present application's assignment to Nokia Corporation was recorded February 22, 2002, at Reel 012650, Frame 0040. Thus, the two applications were co-assigned.

Sexton is barred from being used as prior art to show obviousness, under 35 U.S.C. 103(c). 35 U.S.C. 103(c) bars a reference from being used as prior art to show obviousness when it was subject to an obligation of assignment to the same entity at the time of the invention, and is only available as prior art under 35 U.S.C. 102(e). As explained above, Sexton meets both of those conditions, and, thus, is not proper prior art to show obviousness.

The rejection of claims 27 and 37 acknowledges, at page 10, item 13, that the other references Stenstrom and Zangi fail to disclose all the limitations of the claims. Therefore, in the absence of Sexton, the rejection of claims 27 and 37 cannot be maintained. It is, therefore, respectfully requested that the rejection of claims 27 and 37 be reversed.

Clear Error in the Rejection of Claims 21, 32, and 38

Claim 21 recites a "decision feedback sequence estimator" comprising various features. The Office Action took the position that Stenstrom discloses the "decision feedback sequence estimator" but fails to disclose the various features. The Office Action took the position that Zangi discloses the various features. The Office Action stated that it would have been obvious to combine Stenstrom and Zangi "so as to provide computational efficiency for computing filter coefficients," citing column 2, lines 8-10 of

Zangi. Applicants respectfully submit that this rejection constitutes clear error, because it is clearly improper hindsight reconstruction.

Zangi does mention that its decision feedback sequence estimation (DFSE) equalizer provides a computationally efficient method, and states that the method is for "computing coefficients of a finite impulse response pre-filter applied prior to the decision algorithm in the equalizer." See column 2, lines 8-10.

However, Stenstrom claims that its apparatus and method effectively minimize the computational load and reduce overall power consumption in a receiver by the portion of Stenstrom that relates to the pre-filter and equalizer, as explained at column 2, lines 64-67 thereof. Indeed, Stenstrom is specifically designed to address this alleged need, as explained at column 2, lines 57-61. One of ordinary skill in the art, viewing Stenstrom would not be motivated to combine Stenstrom with Zangi, because doing so would render Stenstrom inoperable for its intended purpose.

MPEP 2143.01(V) states that "THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE," (Capital letters in original.) and explains that "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." Moreover, MPEP 2145(III) states that "the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose." The proposed combination would render the primary reference inoperable for its intended purpose by changing the relationship between the equalizer and pre-filter in Stenstrom, and therefore undoing the minimization of computational load, for which Stenstrom was intended. The proposed combination would also render the primary reference inoperable for its intended purpose by adding additional circuit components to Stenstrom, and therefore undoing the reduction of overall power consumption, for which Stenstrom was also intended.

Indeed, the only purported benefit of Zangi is computational efficiency, but Stenstrom already purports to minimize computational load. Because Stenstrom already allegedly fully solves the problem of computational load, one of ordinary skill in the art would not be motivated to change Stenstrom to include Zangi, thereby apparently losing the advantage of minimizing computational load and increasing power consumption through the addition of further circuit components. Indeed, while Zangi claims to improve computational efficiency, it does not claim to improve computational efficiency relative to Stenstrom's system, but rather relative to one that has a significant computational load, as can be seen in Zangi at column 2, lines 1-6 ("Finding the appropriate filter coefficients accounts for a substantial portion of the computational load of the equalizer.").

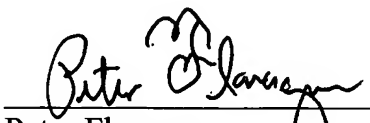
Accordingly, one of ordinary skill in the art, clearly would not be motivated to combine Zangi with Stenstrom, because no benefit would be expected to arise from the combination (because Stenstrom already allegedly minimizes computational load), and because the combination would be expected to undo the purposes for which Stenstrom was intended. Therefore, it is respectfully requested that the rejection of claim 21 be reversed.

It is unclear from the Advisory Action whether the rejection of claims 32 and 38 are also acknowledged not to be anticipated by Stenstrom. Applicants have understood the Advisory Action considering the rejections of those claims to be a rejection in view of the combination of Stenstrom and Zangi in view of Applicants' amendments and persuasive arguments regarding the teachings of Stenstrom as compared to claims 21, 32, and 38. As understood, it is respectfully submitted that the arguments above regarding the impropriety of the combination of Zangi and Stenstrom also apply to the rejections of claims 32 and 38, although it is recognized that those rejections originally were (like the rejection of claim 21) based on Stenstrom alone.

Reconsideration and withdrawal of the rejections, in view of the clear errors in the Office Action, is respectfully requested. In the event this paper is not being timely filed,

the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: PTO/SB/33 Form
Notice of Appeal
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